

Please amend claims 76-78, 84-86, 93, and 99-100 and cancel claim 83. These amendments are reflected in the following listing of claims, which will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1-75. Canceled

76. (Currently Amended) A method for modulating cell adhesion, comprising contacting a cadherin-expressing cell with an antibody that binds to a cyclic peptide that comprises the sequence His-Ala-Val and modulates cadherin-mediated cell adhesion wherein the cyclic peptide has the formula:



wherein X<sub>1</sub> and X<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds, and wherein X<sub>1</sub> and X<sub>2</sub> independently range in size from 0 to 10 residues, such that the sum of residues contained within X<sub>1</sub> and X<sub>2</sub> ranges from 1 to 12;

wherein Y<sub>1</sub> and Y<sub>2</sub> are independently selected from the group consisting of amino acid residues, and wherein a covalent bond is formed between residues Y<sub>1</sub> and Y<sub>2</sub>; and

wherein Z<sub>1</sub> and Z<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds.

77. (Currently Amended) A method for targeting a drug to a cadherin-expressing cell in a mammal, comprising administering to a mammal an antibody that binds to a cyclic peptide that comprises the sequence His-Ala-Val and modulates cadherin-mediated cell adhesion, wherein said antibody is linked to a drug, wherein the cyclic peptide has the formula:



wherein X<sub>1</sub> and X<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds, and wherein X<sub>1</sub> and X<sub>2</sub> independently range in size from 0 to 10 residues, such that the sum of residues contained within X<sub>1</sub> and X<sub>2</sub> ranges from 1 to 12;

wherein Y<sub>1</sub> and Y<sub>2</sub> are independently selected from the group consisting of amino acid residues, and wherein a covalent bond is formed between residues Y<sub>1</sub> and Y<sub>2</sub>; and

wherein Z<sub>1</sub> and Z<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds.

78. (Currently Amended) A method for detecting the presence of cadherin-expressing cells in a sample, comprising:

(a) contacting a sample with an antibody that binds to a cyclic peptide that comprises the sequence His-Ala-Val and modulates cadherin-mediated cell adhesion under conditions and for a time sufficient to allow formation of an antibody-cadherin complex; and

(b) detecting the level of antibody-cadherin complex, and therefrom detecting the presence of cadherin expressing cells in a sample, wherein the cyclic peptide has the formula:



wherein X<sub>1</sub> and X<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds, and wherein X<sub>1</sub> and X<sub>2</sub> independently range in size from 0 to 10 residues, such that the sum of residues contained within X<sub>1</sub> and X<sub>2</sub> ranges from 1 to 12;

wherein Y<sub>1</sub> and Y<sub>2</sub> are independently selected from the group consisting of amino acid residues, and wherein a covalent bond is formed between residues Y<sub>1</sub> and Y<sub>2</sub>; and

wherein Z<sub>1</sub> and Z<sub>2</sub> are optional, and if present, are independently selected from the group consisting of amino acid residues and combinations thereof in which the residues are linked by peptide bonds.

79. (Original) A method according to claim 78, wherein said antibody is linked to a support material.

80. (Original) A method according to claim 79, wherein said antibody is linked to a detectable marker.

81. (Original) A method according to claim 80, wherein said detectable marker is a fluorescent marker, and wherein the step of detecting is performed using fluorescence activated cell sorting.

82-83. Canceled

84. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Z<sub>1</sub> is not present and Y<sub>1</sub> comprises an N-acetyl group.

85. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Z<sub>2</sub> is not present and Y<sub>2</sub> comprises a C-terminal amide group.

86. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Y<sub>1</sub> and Y<sub>2</sub> are covalently linked via a disulfide bond.

87. (Previously Presented) The method of claim 86 wherein Y<sub>1</sub> and Y<sub>2</sub> are each independently selected from the group consisting of penicillamine,  $\beta,\beta$ -tetramethylene cysteine,  $\beta,\beta$ -pentamethylene cysteine,  $\beta$ -mercaptopropionic acid,  $\beta,\beta$ -pentamethylene- $\beta$ -mercaptopropionic acid, 2-mercaptobenzene, 2-mercaptoaniline, 2-mercaptoproline and derivatives thereof.

88. (Previously Presented) The method of claim 86 wherein Y<sub>1</sub> and Y<sub>2</sub> are cysteine residues or derivatives thereof.

89. (Previously Presented) The method of claim 88 wherein wherein said cyclic peptide comprises the sequence Cys-His-Ala-Val-Cys (SEQ ID NO:8).

90. (Previously Presented) The method of claim 89 further comprising an N-acetyl group.

91. (Previously Presented) The method of claim 89 further comprising a C-terminal amide group.

92. (Previously Presented) The method of claim 88 wherein said cyclic peptide comprises a sequence selected from the group consisting of Cys-Ala-His-Ala-Val-Asp-Ile-Cys (SEQ ID NO:10), Cys-Ser-His-Ala-Val-Cys (SEQ ID NO:12), Cys-His-Ala-Val-Ser-Cys (SEQ ID NO:14), Cys-Ala-His-Ala-Val-Asp-Cys (SEQ ID NO:16) and Cys-Ser-His-Ala-Val-Ser-Ser-Cys (SEQ ID NO:18).

93. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Y<sub>1</sub> and Y<sub>2</sub> are covalently linked via an amide bond.

94. (Previously Presented) The method of claim 93 wherein said amide bond is formed between terminal functional groups.

95. (Previously Presented) The method of claim 93 wherein said amide bond is formed between residue side-chains.

96. (Previously Presented) The method of claim 93 wherein said amide bond is formed between one terminal functional group and one residue side chain.

97. (Previously Presented) The method of claim 93, wherein:

(a) Y<sub>1</sub> is selected from the group consisting of lysine, ornithine, and derivatives thereof and Y<sub>2</sub> is selected from the group consisting of aspartate, glutamate and derivatives thereof; or

(b) Y<sub>2</sub> is selected from the group consisting of lysine, ornithine and derivatives thereof and Y<sub>1</sub> is selected from the group consisting of aspartate, glutamate and derivatives thereof.

98. (Previously Presented) The method of claim 93 wherein said cyclic peptide comprises the sequence Lys-His-Ala-Val-Asp (SEQ ID NO:20) or Ala-His-Ala-Val-Asp-Ile (SEQ ID NO:44).

99. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Y<sub>1</sub> and Y<sub>2</sub> are covalently linked via a thioether bond.

100. (Currently Amended) The method of ~~claim 83~~ any one of claims 76-78 wherein Y<sub>1</sub> and Y<sub>2</sub> are each tryptophan or a derivative thereof, such that said covalent bond generates a  $\delta_1\delta_1$ -ditryptophan, or a derivative thereof.